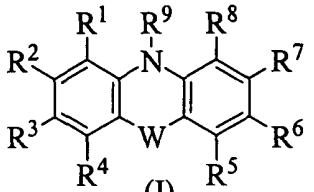
Claims

1. A method for treating a patient having a neoplasm, said method comprising administering to said patient:

a) a first compound having the formula (I):

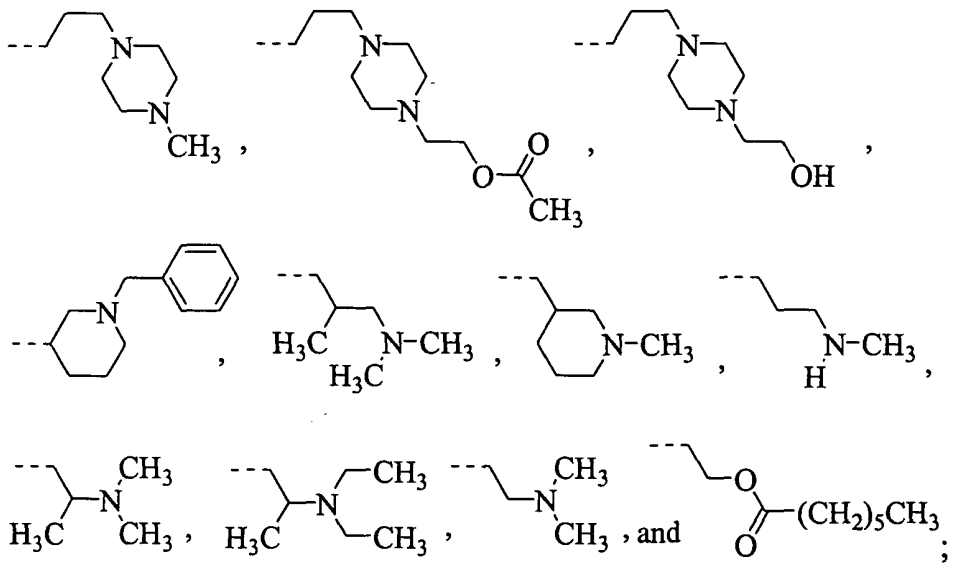


(I) ,

or a pharmaceutically acceptable salt thereof,

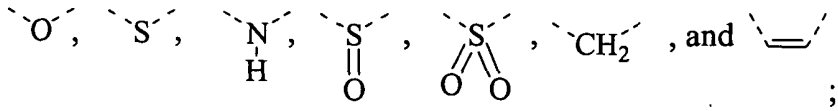
wherein R^2 is selected from the group consisting of: CF_3, halo, OCH_3, $COCH_3$, CN, OCF_3, $COCH_2CH_3$, $CO(CH_2)_2CH_3$, and SCH_2CH_3;

R^9 is selected from the group consisting of:



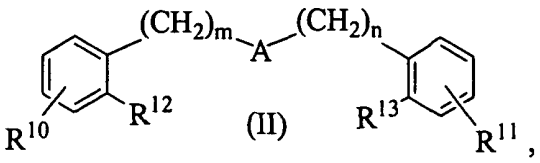
;

each of R^1, R^3, R^4, R^5, R^6, R^7, and R^8 is independently H, OH, F, OCF_3, or OCH_3; and W is selected from the group consisting of:



;

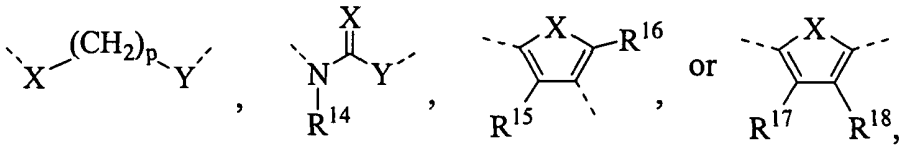
and, b) a second compound of formula (II):



(II)

or a pharmaceutically acceptable salt thereof,

wherein A is



wherein

each of X and Y is, independently, O, NR^{19}, or S,

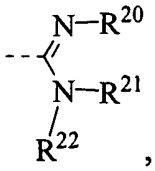
each of R^{14} and R^{19} is, independently, H or C_1-C_6 alkyl,

each of R^{15}, R^{16}, R^{17}, and R^{18} is, independently, H, C_1-C_6 alkyl, halogen, C_1-C_6 alkyloxy,C_6-C_{18} aryloxy, or C_6-C_{18} aryl-C_1-C_6 alkyloxy,

p is an integer between 2 and 6, inclusive,

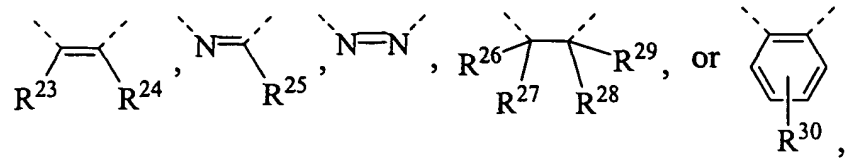
each of m and n is, independently, an integer between 0 and 2, inclusive,

each of R^{10} and R^{11} is



,

wherein R^{21} is H, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkyloxy-C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, or C_6-C_{18} aryl, R^{22} is H, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkyloxy, C_1-C_6 alkyloxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, carbo(C_1-C_6 alkyloxy), carbo(C_6-C_{18} aryl C_1-C_6 alkyloxy), carbo(C_6-C_{18} aryloxy), or C_6-C_{18} aryl, and R^{20} is H, OH, or C_1-C_6 alkyloxy, or R^{20} and R^{21} together represent



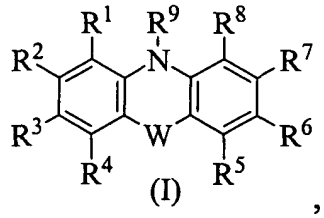
wherein each of R^{23}, R^{24}, and R^{25} is, independently, H, C_1-C_6 alkyl, halogen, or trifluoromethyl, each of R^{26}, R^{27}, R^{28}, and R^{29} is, independently, H or C_1-C_6 alkyl, and R^{30} is H, halogen, trifluoromethyl, OCF_3, NO_2, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkyloxy, C_1-C_6 alkoxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, or C_6-C_{18} aryl,

each of R^{12} and R^{13} is, independently, H, Cl, Br, OH, OCH_3, OCF_3, NO_2, and NH_2, or R^{12} and R^{13} together form a single bond;

wherein said first and second compounds are administered simultaneously, or within 14 days of each other, in amounts sufficient to inhibit the growth of said neoplasm.

2. A method for treating a patient having a neoplasm, said method comprising administering to said patient:

a) a first compound having the formula (I):

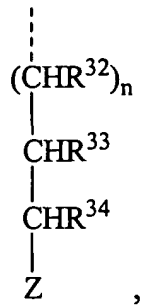


(I)

or a pharmaceutically acceptable salt thereof,

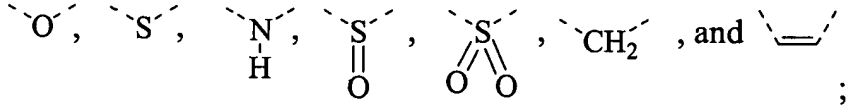
wherein R^2 is selected from the group consisting of: CF_3, halo, OCH_3, $COCH_3$, CN, OCF_3, $COCH_2CH_3$, $CO(CH_2)_2CH_3$, and SCH_2CH_3;

R^9 has the formula:



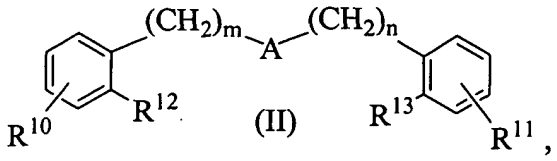
wherein n is 0 or 1, each of R^{32}, R^{33}, and R^{34} is, independently, H or substituted or unsubstituted C_{1-6} alkyl, and Z is $NR^{35}R^{36}$ or OR^{37}, wherein each of R^{35} and R^{36} is, independently, H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted alkaryl, substituted or unsubstituted alkheteroaryl, and R^{37} is H, C_{1-6} alkyl, or C_{1-7} acyl, wherein any of R^{33}, R^{34}, R^{35}, and R^{36} can be optionally taken together with intervening carbon or non-vicinal O, S, or N atoms to form one or more five- to seven-membered rings, substituted with one or more hydrogens, substituted or unsubstituted C_{1-6} alkyl groups, C_{6-12} aryl groups, alkoxy groups, halogen groups, substituted or unsubstituted alkaryl groups, or substituted or unsubstituted alkheteroaryl groups;

each of R^1, R^3, R^4, R^5, R^6, R^7, and R^8 is independently H, OH, F, OCF_3, or OCH_3; and W is selected from the group consisting of:



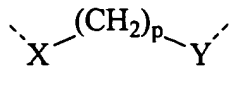
; and

b) a second compound of formula (II):, wherein said compound of formula (II) is



or a pharmaceutically acceptable salt thereof,

wherein A is



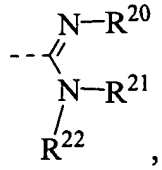
,

each of X and Y is, independently, O or NH,

p is an integer between 2 and 6, inclusive,

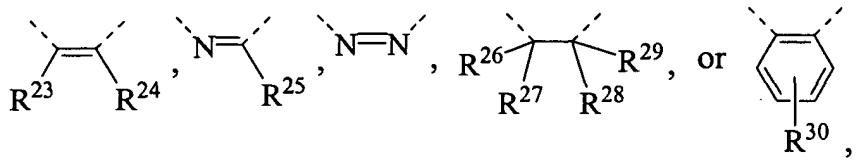
each of m and n is, independently, an integer between 0 and 2, inclusive, wherein the sum of m and n is greater than 0,

each of R^{10} and R^{11} is, independently, selected from the group represented by



,

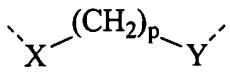
wherein R^{21} is H, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkyloxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, or , R^{22} is H, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_6-C_{18} aryloxy C_1-C_6 alkyl, C_1-C_6 alkoxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, carbo(C_1-C_6 alkoxy), carbo(C_6-C_{18} aryl-C_1-C_6 alkoxy), carbo(C_6-C_{18} aryloxy), or C_6-C_{18} aryl, and R^{20} is H, OH, or oxy(C_1-C_6 alkyl), or R^{20} and R^{21} together represent



wherein each of R^{23}, R^{24}, and R^{25} is, independently, H, C_1-C_6 alkyl, halogen, or trifluoromethyl, each of R^{26}, R^{27}, R^{28}, and R^{29} are, independently, H or C_1-C_6 alkyl, and R^{30} is H, halogen, trifluoromethyl, OCF_3, NO_2, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkyloxy, C_1-C_6 alkoxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, or C_6-C_{18} aryl,

each of R^{12} and R^{13} is, independently, H, Cl, Br, OH, OCH_3, OCF_3, NO_2, and NH_2, or R^{12} and R^{13} together form a single bond;

or A is



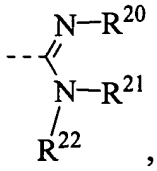
,

each of X and Y is, independently, O or NH,

p is an integer between 2 and 6, inclusive,

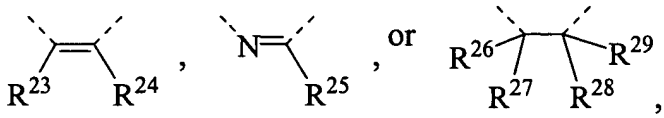
each of m and n is 0, and

each of R^{10} and R^{11} is, independently, selected from the group represented by



,

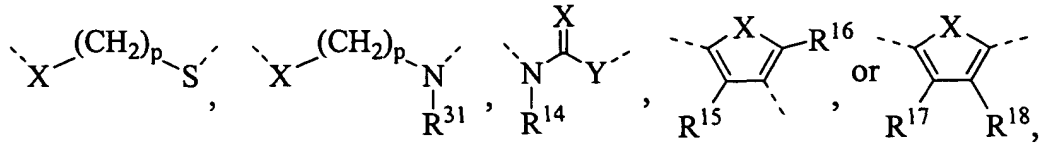
wherein R^{21} is C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkoxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, or C_6-C_{18} aryl, R^{22} is H, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkyloxy, C_1-C_6 alkyloxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, carbo(C_1-C_6 alkyloxy), carbo(C_6-C_{18} aryl C_1-C_6 alkyloxy), carbo(C_6-C_{18} aryloxy), or C_6-C_{18} aryl, and R^{20} is H, OH, or C_1-C_6 alkyloxy, or R^{20} and R^{21} together represent



,

wherein each of R^{23}, R^{24}, and R^{25} is, independently, H, C_1-C_6 alkyl, halogen, or trifluoromethyl, each of R^{26}, R^{27}, and R^{28} is, independently, H or C_1-C_6 alkyl, and R^{29} is C_1-C_6 alkyl, C_1-C_6 alkyloxy, or trifluoromethyl;

or A is



each of X and Y is, independently, O, NR^{19}, or S,

each of R^{14} and R^{19} is, independently, H or C_1-C_6 alkyl,

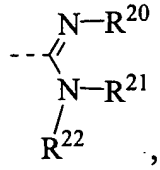
each of R^{15}, R^{16}, R^{17}, and R^{18} is, independently, H, C_1-C_6 alkyl, halogen, C_1-C_6 alkyloxy, C_6-C_{18} aryloxy, or C_6-C_{18} aryl C_1-C_6 alkyloxy,

R^{31} is C_1-C_6 alkyl,

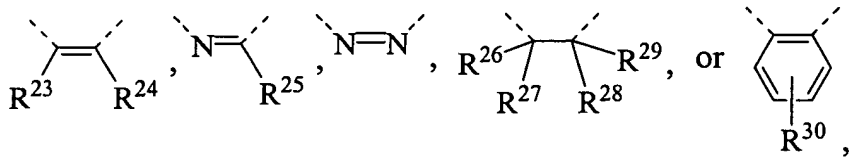
p is an integer between 2 and 6, inclusive,

each of m and n is, independently, an integer between 0 and 2, inclusive,

each of R^{10} and R^{11} is, independently, selected from the group represented by



wherein R^{21} is H, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkoxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, or C_6-C_{18} aryl, R^{22} is H, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_6-C_{18} aryloxy C_1-C_6 alkyl, C_1-C_6 alkyloxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, carbo(C_1-C_6 alkyloxy), carbo(C_6-C_{18} aryl C_1-C_6 alkyloxy), carbo(C_6-C_{18} aryloxy), or C_6-C_{18} aryl, and R^{20} is H, OH, or C_1-C_6 alkyloxy, or R^{20} and R^{21} together represent



wherein each of R^{23}, R^{24}, and R^{25} is, independently, H, C_1-C_6 alkyl, halogen, or trifluoromethyl, each of R^{26}, R^{27}, R^{28}, and R^{29} are, independently, H or

C_1-C_6 alkyl, and R^{30} is H, halogen, trifluoromethyl, OCF_3, NO_2, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkyloxy, C_1-C_6 alkyloxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, or C_6-C_{18} aryl, and

each of R^{12} and R^{13} is, independently, H, Cl, Br, OH, OCH_3, OCF_3, NO_2, and NH_2, or R^{12} and R^{13} together form a single bond.

3. The method of claim 1, wherein said compound of formula (I) is acepromazine, chlorfenethazine, cyamemazine, fluphenazine, mepazine, methotrimeprazine, methoxypromazine, norchlorpromazine, perazine, perphenazine, prochlorperazine, promethazine, propiomazine, putaperazine, thiethylperazine, thiopropazate, thioridazine, trifluoperazine, or triflupromazine.

4. The method of claim 1, wherein said compound of formula (II) is pentamidine, propamidine, butamidine, heptamidine, nonamidine, dibrompropamidine, 2,5-bis(4-amidinophenyl)furan, 2,5-bis(4-amidinophenyl)furan-bis-O-methylamidoxime, 2,5-bis(4-amidinophenyl)furan-bis-O-4-fluorophenyl, 2,5-bis(4-amidinophenyl)furan-bis-O-4-methoxyphenyl, 2,4-bis(4-amidinophenyl)furan, 2,4-bis(4-amidinophenyl)furan-bis-O-methylamidoxime, 2,4-bis(4-amidinophenyl)furan-bis-O-4-fluorophenyl, 2,4-bis(4-amidinophenyl)furan-bis-O-4-methoxyphenyl, 2,5-bis(4-amidinophenyl) thiophene, 2,5-bis(4-amidinophenyl) thiophene-bis-O-methylamidoxime, 2,4-bis(4-amidinophenyl)thiophene, or 2,4-bis(4-amidinophenyl)thiophene-bis-O-methylamidoxime.

5. The method of claim 2, wherein said compound of formula (I) is acepromazine, chlorfenethazine, chlorpromazine, cyamemazine, fluphenazine, mepazine, methotrimeprazine, methoxypromazine, norchlorpromazine, perazine, perphenazine, prochlorperazine, promethazine, propiomazine, putaperazine, thiethylperazine, thiopropazate, thioridazine, trifluoperazine, or triflupromazine.

6. The method of claim 2, wherein said compound of formula (II) is propamidine, butamidine, heptamidine, nonamidine, dibrompropamidine, 2,5-bis(4-amidinophenyl)furan, 2,5-bis(4-amidinophenyl)furan-bis-O-methylamidoxime, 2,5-bis(4-amidinophenyl)furan-bis-O-4-fluorophenyl, 2,5-bis(4-amidinophenyl)furan-bis-O-4-methoxyphenyl, 2,4-bis(4-amidinophenyl)furan, 2,4-bis(4-amidinophenyl)furan-bis-O-methylamidoxime, 2,4-bis(4-amidinophenyl)furan-bis-O-4-fluorophenyl, 2,4-bis(4-amidinophenyl)furan-bis-O-4-methoxyphenyl, 2,5-bis(4-amidinophenyl) thiophene, 2,5-bis(4-amidinophenyl) thiophene-bis-O-methylamidoxime, 2,4-bis(4-amidinophenyl)thiophene, or 2,4-bis(4-amidinophenyl)thiophene-bis-O-methylamidoxime.

7. The method of claim 1 or claim 2, wherein said compound of formula (I) and compound of formula (II) are administered within ten days of each other.

8. The method of claim 7, wherein said compound of formula (I) and compound of formula (II) are administered within five days of each other.

9. The method of claim 8, wherein said compound of formula (I) and compound of formula (II) are administered within twenty-four hours of each other.

10. A method for treating a patient who has a neoplasm, or inhibiting the development of a neoplasm in a patient, said method comprising administering to said patient:

a) a first compound selected from acepromazine, chlorfenethazine, chlorpromazine, cyamemazine, fluphenazine, mepazine, methotrimeprazine, methoxypromazine, norchlorpromazine, perazine, perphenazine, prochlorperazine, promethazine, propiomazine, putaperazine, thiethylperazine, thiopropazate,

thioridazine, trifluoperazine, and triflupromazine, or a pharmaceutically acceptable salt thereof, and

b) a second compound selected from pentamidine, propamidine, butamidine, heptamidine, nonamidine, stilbamidine, hydroxystilbamidine, diminazene, benzamidine, phenamidine, dibrompropamidine, 1,3-bis(4-amidino-2-methoxyphenoxy)propane, netropsin, distamycin, phenamidine, amicarbalide, bleomycin, actinomycin, daunorubicin, 1,3-bis(4-amidino-2-methoxyphenoxy)propane, phenamidine, amicarbalide, 1,5-bis(4'-(N-hydroxyamidino)phenoxy)pentane, 1,3-bis(4'-(N-hydroxyamidino)phenoxy)propane, 1,3-bis(2'-methoxy-4'-(N-hydroxyamidino)phenoxy)propane, 1,4-bis(4'-(N-hydroxyamidino)phenoxy)butane, 1,5-bis(4'-(N-hydroxyamidino)phenoxy)pentane, 1,4-bis(4'-(N-hydroxyamidino)phenoxy)butane, 1,3-bis(4'-(4-hydroxyamidino)phenoxy)propane, 1,3-bis(2'-methoxy-4'-(N-hydroxyamidino)phenoxy)propane, 2,5-bis[4-amidinophenyl]furan, 2,5-bis[4-amidinophenyl]furan-bis-amidoxime, 2,5-bis[4-amidinophenyl]furan-bis-O-methylamidoxime, 2,5-bis[4-amidinophenyl]furan-bis-O-ethylamidoxime, 2,5-bis(4-amidinophenyl)furan-bis-O-4-fluorophenyl, 2,5-bis(4-amidinophenyl)furan-bis-O-4-methoxyphenyl, 2,4-bis(4-amidinophenyl)furan, 2,4-bis(4-amidinophenyl)furan-bis-O-methylamidoxime, 2,4-bis(4-amidinophenyl)furan-bis-O-4-fluorophenyl, 2,4-bis(4-amidinophenyl)furan-bis-O-4-methoxyphenyl, 2,5-bis(4-amidinophenyl) thiophene, 2,5-bis(4-amidinophenyl) thiophene-bis-O-methylamidoxime, 2,4-bis(4-amidinophenyl)thiophene, 2,4-bis(4-amidinophenyl)thiophene-bis-O-methylamidoxime, 2,8-diamidinodibenzothiophene, 2,8-bis(N-isopropylamidino)carbazole, 2,8-bis(N-hydroxyamidino)carbazole, 2,8-bis(2-imidazolinyl)dibenzothiophene, 2,8-bis(2-imidazolinyl)-5,5-dioxodibenzothiophene, 3,7-diamidinodibenzothiophene, 3,7-bis(N-isopropylamidino)dibenzothiophene, 3,7-bis(N-

hydroxyamidino)dibenzothiophene, 3,7-diaminodibenzothiophene, 3,7-dibromodibenzothiophene, 3,7-dicyanodibenzothiophene, 2,8-diamidinodibenzofuran, 2,8-di(2-imidazolinyl)dibenzofuran, 2,8-di(N-isopropylamidino)dibenzofuran, 2,8-di(N-hydroxylamidino)dibenzofuran, 3,7-di(2-imidazolinyl)dibenzofuran, 3,7-di(isopropylamidino)dibenzofuran, 3,7-di(N-hydroxylamidino)dibenzofuran, 2,8-dicyanodibenzofuran, 4,4'-dibromo-2,2'-dinitrobiphenyl, 2-methoxy-2'-nitro-4,4'-dibromobiphenyl, 2-methoxy-2'-amino-4,4'-dibromobiphenyl, 3,7-dibromodibenzofuran, 3,7-dicyanodibenzofuran, 2,5-bis(5-amidino-2-benzimidazolyl)pyrrole, 2,5-bis[5-(2-imidazolinyl)-2-benzimidazolyl]pyrrole, 2,6-bis[5-(2-imidazolinyl)-2-benzimidazolyl]pyridine, 1-methyl-2,5-bis(5-amidino-2-benzimidazolyl)pyrrole, 1-methyl-2,5-bis[5-(2-imidazolyl)-2-benzimidazolyl]pyrrole, 1-methyl-2,5-bis[5-(1,4,5,6-tetrahydro-2-pyrimidinyl)-2-benzimidazolyl]pyrrole, 2,6-bis(5-amidino-2-benzimidazoyl)pyridine, 2,6-bis[5-(1,4,5,6-tetrahydro-2-pyrimidinyl)-2-benzimidazolyl]pyridine, 2,5-bis(5-amidino-2-benzimidazolyl)furan, 2,5-bis-[5-(2-imidazolinyl)-2-benzimidazolyl]furan, 2,5-bis-(5-N-isopropylamidino-2-benzimidazolyl)furan, 2,5-bis-(4-guanylphenyl)furan, 2,5-bis(4-guanylphenyl)-3,4-dimethylfuran, 2,5-bis{p-[2-(3,4,5,6-tetrahydropyrimidyl)phenyl]}furan, 2,5-bis[4-(2-imidazolinyl)phenyl]furan, 2,5[bis-{4-(2-tetrahydropyrimidinyl)}phenyl]-3-(p-tolyloxy)furan, 2,5[bis{4-(2-imidazolinyl)}phenyl]-3-(p-tolyloxy)furan, 2,5-bis{4-[5-(N-2-aminoethylamido)benzimidazol-2-yl]phenyl}furan, 2,5-bis[4-(3a,4,5,6,7,7a-hexahydro-1H-benzimidazol-2-yl)phenyl]furan, 2,5-bis[4-(4,5,6,7-tetrahydro-1H-1,3-diazepin-2-yl)phenyl]furan, 2,5-bis(4-N,N-dimethylcarboxhydrazidephenyl)furan, 2,5-bis{4-[2-(N-2-hydroxyethyl)imidazolinyl]phenyl}furan, 2,5-bis[4-(N-isopropylamidino)phenyl]furan, 2,5-bis{4-[3-(dimethylaminopropyl)amidino]phenyl}furan, 2,5-bis{4-[N-(3-aminopropyl)amidino]phenyl}furan, 2,5-bis[2-(imidzaolinyl)phenyl]-3,4-bis(methoxymethyl)furan, 2,5-bis[4-N-(dimethylaminoethyl)guanyl]phenylfuran,

2,5-bis{4-[(N-2-hydroxyethyl)guanyl]phenyl}furan, 2,5-bis[4-N-(cyclopropylguanyl)phenyl]furan, 2,5-bis[4-(N,N-diethylaminopropyl)guanyl]phenylfuran, 2,5-bis{4-[2-(N-ethylimidazolinyl)]phenyl}furan, 2,5-bis{4-[N-(3-pentylguanyl)]}phenylfuran, 2,5-bis[4-(2-imidazolinyl)phenyl]-3-methoxyfuran, 2,5-bis[4-(N-isopropylamidino)phenyl]-3-methylfuran, bis[5-amidino-2-benzimidazolyl]methane, bis[5-(2-imidazolyl)-2-benzimidazolyl]methane, 1,2-bis[5-amidino-2-benzimidazolyl]ethane, 1,2-bis[5-(2-imidazolyl)-2-benzimidazolyl]ethane, 1,3-bis[5-amidino-2-benzimidazolyl]propane, 1,3-bis[5-(2-imidazolyl)-2-benzimidazolyl]propane, 1,4-bis[5-amidino-2-benzimidazolyl]propane, 1,4-bis[5-(2-imidazolyl)-2-benzimidazolyl]butane, 1,8-bis[5-amidino-2-benzimidazolyl]octane, trans-1,2-bis[5-amidino-2-benzimidazolyl]ethene, 1,4-bis[5-(2-imidazolyl)-2-benzimidazolyl]-1-butene, 1,4-bis[5-(2-imidazolyl)-2-benzimidazolyl]-2-butene, 1,4-bis[5-(2-imidazolyl)-2-benzimidazolyl]-1-methylbutane, 1,4-bis[5-(2-imidazolyl)-2-benzimidazolyl]-2-ethylbutane, 1,4-bis[5-(2-imidazolyl)-2-benzimidazolyl]-1-methyl-1-butene, 1,4-bis[5-(2-imidazolyl)-2-benzimidazolyl]-2,3-diethyl-2-butene, 1,4-bis[5-(2-imidazolyl)-2-benzimidazolyl]-1,3-butadiene, 1,4-bis[5-(2-imidazolyl)-2-benzimidazolyl]-2-methyl-1,3-butadiene, bis[5-(2-pyrimidyl)-2-benzimidazolyl]methane, 1,2-bis[5-(2-pyrimidyl)-2-benzimidazolyl]ethane, 1,3-bis[5-amidino-2-benzimidazolyl]propane, 1,3-bis[5-(2-pyrimidyl)-2-benzimidazolyl]propane, 1,4-bis[5-(2-pyrimidyl)-2-benzimidazolyl]butane, 1,4-bis[5-(2-pyrimidyl)-2-benzimidazolyl]-1-butene, 1,4-bis[5-(2-pyrimidyl)-2-benzimidazolyl]-2-butene, 1,4-bis[5-(2-pyrimidyl)-2-benzimidazolyl]-1-methylbutane, 1,4-bis[5-(2-pyrimidyl)-2-benzimidazolyl]-2-ethylbutane, 1,4-bis[5-(2-pyrimidyl)-2-benzimidazolyl]-1-methyl-1-butene, 1,4-bis[5-(2-pyrimidyl)-2-benzimidazolyl]-2,3-diethyl-2-butene, 1,4-bis[5-(2-pyrimidyl)-2-benzimidazolyl]-1,3-butadiene, and 1,4-bis[5-(2-pyrimidyl)-2-benzimidazolyl]-2-methyl-1,3-butadiene, 2,4-bis(4-guanylphenyl)pyrimidine, 2,4-bis(4-imidazolin-2-

yl)pyrimidine, 2,4-bis[(tetrahydropyrimidinyl-2-yl)phenyl]pyrimidine, 2-(4-[N-i-propylguanyl]phenyl)-4-(2-methoxy-4-[N-i-propylguanyl]phenyl)pyrimidine, 4-(N-cyclopentylamidino)-1,2-phenylene diamine, 2,5-bis-[2-(5-amidino)benzimidazoyl]furan, 2,5-bis[2-{5-(2-imidazolino)}benzimidazoyl]furan, 2,5-bis[2-(5-N-isopropylamidino)benzimidazoyl]furan, 2,5-bis[2-(5-N-cyclopentylamidino)benzimidazoyl]furan, 2,5-bis[2-(5-amidino)benzimidazoyl]pyrrole, 2,5-bis[2-{5-(2-imidazolino)}benzimidazoyl]pyrrole, 2,5-bis[2-(5-N-isopropylamidino)benzimidazoyl]pyrrole, 2,5-bis[2-(5-N-cyclopentylamidino)benzimidazoyl]pyrrole, 1-methyl-2,5-bis[2-(5-amidino)benzimidazoyl]pyrrole, 2,5-bis[2-{5-(2-imidazolino)}benzimidazoyl]-1-methylpyrrole, 2,5-bis[2-(5-N-cyclopentylamidino)benzimidazoyl]-1-methylpyrrole, 2,5-bis[2-(5-N-isopropylamidino)benzimidazoyl]thiophene, 2,6-bis[2-{5-(2-imidazolino)}benzimidazoyl]pyridine, 2,6-bis[2-(5-amidino)benzimidazoyl]pyridine, 4,4'-bis[2-(5-N-isopropylamidino)benzimidazoyl]-1,2-diphenylethane, 4,4'-bis[2-(5-N-cyclopentylamidino)benzimidazoyl]-2,5-diphenylfuran, 2,5-bis[2-(5-amidino)benzimidazoyl]benzo[b]furan, 2,5-bis[2-(5-N-cyclopentylamidino)benzimidazoyl]benzo[b]furan, 2,7-bis[2-(5-N-isopropylamidino)benzimidazoyl]fluorene, 2,5-bis[4-(3-(N-morpholinopropyl)carbamoyl)phenyl]furan, 2,5-bis[4-(2-N,N-dimethylaminoethylcarbamoyl)phenyl]furan, 2,5-bis[4-(3-N,N-dimethylaminopropylcarbamoyl)phenyl]furan, 2,5-bis[4-(3-N-methyl-3-N-phenylaminopropylcarbamoyl)phenyl]furan, 2,5-bis[4-(3-N, N^8,N^{11}-trimethylaminopropylcarbamoyl)phenyl]furan, 2,5-bis[3-amidinophenyl]furan, 2,5-bis[3-(N-isopropylamidino)amidinophenyl]furan, 2,5-bis[3[(N-(2-dimethylaminoethyl)amidino]phenylfuran, 2,5-bis[4-(N-2,2,2-trichloroethoxycarbonyl)amidinophenyl]furan, 2,5-bis[4-(N-thioethylcarbonyl) amidinophenyl]furan, 2,5-bis[4-(N-benzyloxycarbonyl)amidinophenyl]furan, 2,5-

bis[4-(N-phenoxycarbonyl)amidinophenyl]furan, 2,5-bis[4-(N-(4-fluoro)-phenoxycarbonyl)amidinophenyl]furan, 2,5-bis[4-(N-(4-methoxy)phenoxycarbonyl)amidinophenyl]furan, 2,5-bis[4(1-acetoxyethoxycarbonyl)amidinophenyl]furan, and 2,5-bis[4-(N-(3-fluoro)phenoxycarbonyl)amidinophenyl]furan, or a pharmaceutically acceptable salt thereof, wherein said first compound and said second compound are administered simultaneously or within 14 days of each other, in amounts sufficient to treat or inhibit the development of a neoplasm in said patient.

11. The method of any of the claims 1, 2 or 10, wherein said neoplasm is cancer.

12. The method of claim 11, wherein said method is performed in conjunction with administering to said patient an additional treatment for cancer, wherein said method and said additional treatment are administered within 6 months of each other.

13. The method of claim 12, wherein said additional treatment and said method of any of the claims 1, 2 or 10 are administered within fourteen days of each other.

14. The method of claim 12, wherein said additional treatment and said method of any of the claims 1, 2 or 10 are administered within five days of each other.

15. The method of claim 12, wherein said additional treatment and said method of any of the claims 1, 2 or 10 are administered within twenty-four hours of each other.

16. The method of claim 12, said additional treatment comprising surgery, radiation therapy, chemotherapy, immunotherapy, anti-angiogenesis therapy, or gene therapy.

17. The method of claim 13, said additional treatment comprising chemotherapy with one or more Group A antiproliferative agents.

18. The method of claim 17, wherein said antiproliferative agent is selected from : bleomycin, carmustine, cisplatin, daunorubicin, etoposide, melphalan, mercaptopurine, methotrexate, mitomycin, vinblastine, paclitaxel, docetaxel, vincristine, vinorelbine, cyclophosphamide, chlorambucil, gemcitabine, capecitabine, 5-fluorouracil, fludarabine, raltitrexed, irinotecan, topotecan, doxorubicin, epirubicin, letrozole, anastrazole, formestane, exemestane, tamoxifen, toremofine, goserelin, leuporelin, bicalutamide, flutamide, nilutamide, hypericin, trastuzumab, or rituximab, or any combination thereof.

19. The method of claim 11, wherein said cancer is selected from the group consisting of acute leukemia, acute lymphocytic leukemia, acute myelocytic leukemia, acute myeloblastic leukemia, acute promyelocytic leukemia, acute myelomonocytic leukemia, acute monocytic leukemia, acute erythroleukemia, chronic leukemia, chronic myelocytic leukemia, chronic lymphocytic leukemia, polycythemia vera, Hodgkin's disease, non-Hodgkin's disease, Waldenstrom's macroglobulinemia, heavy chain disease, fibrosarcoma, myxosarcoma, liposarcoma, chondrosarcoma, osteogenic sarcoma, chordoma, angiosarcoma, endotheliosarcoma, lymphangiosarcoma, lymphangioendotheliosarcoma, synovioma, mesothelioma, Ewing's tumor, leiomyosarcoma, rhabdomyosarcoma, colon carcinoma, pancreatic cancer, breast cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, basal cell carcinoma, adenocarcinoma, sweat gland carcinoma, sebaceous gland carcinoma, papillary carcinoma, papillary

adenocarcinomas, cystadenocarcinoma, medullary carcinoma, bronchogenic carcinoma, renal cell carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, seminoma, embryonal carcinoma, Wilm's tumor, cervical cancer, uterine cancer, testicular cancer, lung carcinoma, small cell lung carcinoma, bladder carcinoma, epithelial carcinoma, glioma, astrocytoma, medulloblastoma, craniopharyngioma, ependymoma, pinealoma, hemangioblastoma, acoustic neuroma, oligodendriglioma, schwannoma, meningioma, melanoma, neuroblastoma, and retinoblastoma.

20. The method of claim 11, wherein said cancer is lung cancer.

21. The method of claim 20, wherein said lung cancer is selected from the group consisting of squamous cell carcinoma, adenocarcinoma, and large cell carcinoma.

22. The method of claim 11, wherein said cancer is colon cancer.

23. The method of claim 11, wherein said cancer is a cancer of the ovary.

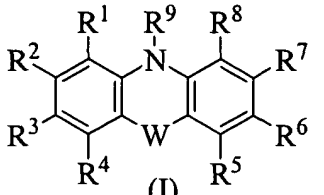
24. The method of claim 23, wherein said cancer of the ovary is adenocarcinoma.

25. The method of claim 11, wherein said cancer is prostate cancer.

26. The method of any of the claims 1, 2 or 10, wherein said compound of formula (I) and compound of formula (II) are administered to said patient by intravenous, intramuscular, inhalation, rectal, or oral administration.

27. A method for treating a patient who has a neoplasm, or inhibiting the development of a neoplasm in a patient, said method comprising administering to said patient a composition comprising:

a) a first compound having the formula (I):

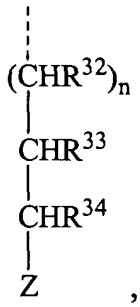


(I) ,

or a pharmaceutically acceptable salt thereof,

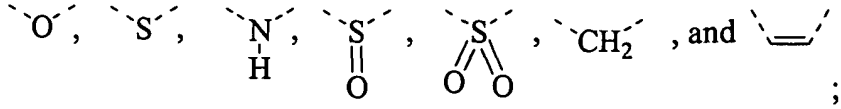
wherein R^2 is selected from the group consisting of: CF_3, halo, OCH_3, $COCH_3$, CN, OCF_3, $COCH_2CH_3$, $CO(CH_2)_2CH_3$, and SCH_2CH_3;

R^9 has the formula:



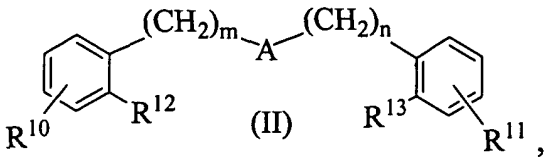
wherein n is 0 or 1, each of R^{32}, R^{33}, and R^{34} is, independently, H or substituted or unsubstituted C_{1-6} alkyl, and Z is $NR^{35}R^{36}$ or OR^{37}, wherein each of R^{35} and R^{36} is, independently, H, substituted or unsubstituted C_{1-6} alkyl, substituted or unsubstituted alkaryl, substituted or unsubstituted alkheteroaryl, and R^{37} is H, C_{1-6} alkyl, or C_{1-7} acyl, wherein any of R^{33}, R^{34}, R^{35}, and R^{36} can be optionally taken together with the intervening carbon atoms to form one or more five- to seven-membered rings that may optionally contain non-vicinal O, S, or N, and are substituted with one or more hydrogens, substituted or unsubstituted C_{1-6} alkyl groups, C_{6-12} aryl groups, alkoxy groups, halogen groups, substituted or unsubstituted alkaryl groups, or substituted or unsubstituted alkheteroaryl groups;

each of R^1, R^3, R^4, R^5, R^6, R^7, and R^8 is independently H, OH, F, OCF_3, or OCH_3; and W is selected from the group consisting of:



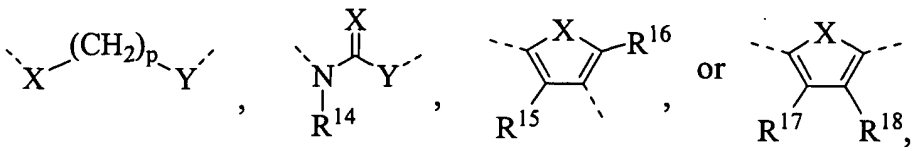
;

and, b) a second compound of formula (II):



or a pharmaceutically acceptable salt thereof,

wherein A is



wherein

each of X and Y is, independently, O, NR^{19}, or S,

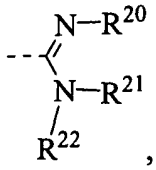
each of R^{14} and R^{19} is, independently, H or C_1-C_6 alkyl,

each of R^{15}, R^{16}, R^{17}, and R^{18} is, independently, H, C_1-C_6 alkyl, halogen, C_1-C_6 alkyloxy,C_6-C_{18} aryloxy, or C_6-C_{18} aryl-C_1-C_6 alkyloxy,

p is an integer between 2 and 6, inclusive,

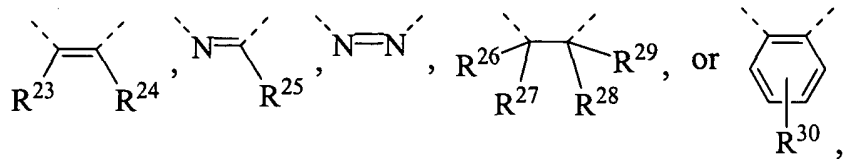
each of m and n is, independently, an integer between 0 and 2, inclusive,

each of R^{10} and R^{11} is



wherein R^{21} is H, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkyloxy-C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, or

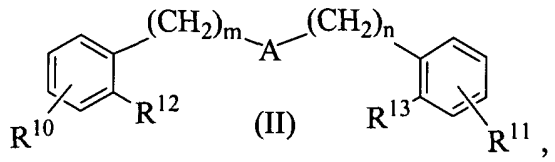
C_6-C_{18} aryl, R^{22} is H, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkyloxy, C_1-C_6 alkyloxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, carbo(C_1-C_6 alkyloxy), carbo(C_6-C_{18} aryl C_1-C_6 alkyloxy), carbo(C_6-C_{18} aryloxy), or C_6-C_{18} aryl, and R^{20} is H, OH, or C_1-C_6 alkyloxy, or R^{20} and R^{21} together represent



wherein each of R^{23}, R^{24}, and R^{25} is, independently, H, C_1-C_6 alkyl, halogen, or trifluoromethyl, each of R^{26}, R^{27}, R^{28}, and R^{29} is, independently, H or C_1-C_6 alkyl, and R^{30} is H, halogen, trifluoromethyl, OCF_3, NO_2, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkyloxy, C_1-C_6 alkoxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, or C_6-C_{18} aryl,

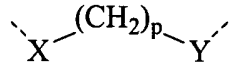
each of R^{12} and R^{13} is, independently, H, Cl, Br, OH, OCH_3, OCF_3, NO_2, and NH_2, or R^{12} and R^{13} together form a single bond.

28. The method of claim 27, wherein said compound of formula (II) is



(II)

wherein A is

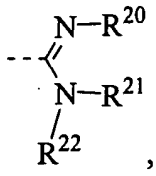


each of X and Y is, independently, O or NH,

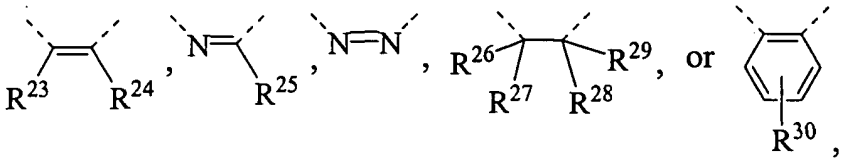
p is an integer between 2 and 6, inclusive,

each of m and n is, independently, an integer between 0 and 2, inclusive, wherein the sum of m and n is greater than 0,

each of R^{10} and R^{11} is, independently, selected from the group represented by



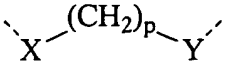
wherein R^{21} is H, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkyloxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, or , R^{22} is H, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_6-C_{18} aryloxy C_1-C_6 alkyl, C_1-C_6 alkoxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, carbo(C_1-C_6 alkoxy), carbo(C_6-C_{18} aryl-C_1-C_6 alkoxy), carbo(C_6-C_{18} aryloxy), or C_6-C_{18} aryl, and R^{20} is H, OH, or oxy(C_1-C_6 alkyl), or R^{20} and R^{21} together represent



wherein each of R^{23}, R^{24}, and R^{25} is, independently, H, C_1-C_6 alkyl, halogen, or trifluoromethyl, each of R^{26}, R^{27}, R^{28}, and R^{29} are, independently, H or C_1-C_6 alkyl, and R^{30} is H, halogen, trifluoromethyl, OCF_3, NO_2, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkyloxy, C_1-C_6 alkoxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, or C_6-C_{18} aryl,

each of R^{12} and R^{13} is, independently, H, Cl, Br, OH, OCH_3, OCF_3, NO_2, and NH_2, or R^{12} and R^{13} together form a single bond;

or A is



each of X and Y is, independently, O or NH,

30. A method for treating a patient who has a neoplasm, or inhibiting the development of a neoplasm, said method comprising administering to said patient:

a) an inhibitor of protein kinase C; and

b) a compound of formula (II),

wherein said protein kinase C inhibitor and said compound of formula (II) are administered simultaneously, or within 14 days of each other, in amounts sufficient to inhibit the growth of said neoplasm.

31. The method of claim 30, further comprising administering to said patient one or more Group A antiproliferative agents, wherein said Group A antiproliferative agent, said protein kinase C inhibitor, and said compound of formula (II) are administered simultaneously, or within 14 days of each other, in amounts sufficient to inhibit the growth of said neoplasm.

32. A method for treating a patient who has a neoplasm, or inhibiting the development of a neoplasm in a patient, said method comprising administering to said patient:

a) a compound of formula (I); and

b) an endo-exonuclease inhibitor,

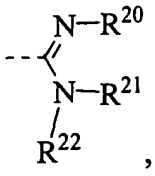
wherein said compound of formula (I) and said endo-exonuclease inhibitor are administered simultaneously, or within 14 days of each other, in amounts sufficient to inhibit the growth of said neoplasm.

33. The method of claim 32, further comprising administering to said patient one or more Group A antiproliferative agents, wherein said Group A antiproliferative agent, said compound of formula (I), and said endo-exonuclease inhibitor are administered simultaneously, or within 14 days of each other, in amounts sufficient to inhibit the growth of said neoplasm.

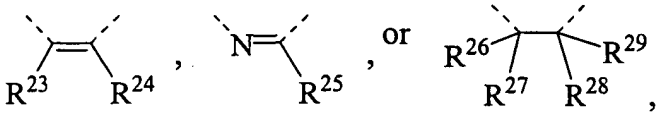
p is an integer between 2 and 6, inclusive,

each of m and n is 0, and

each of R^{10} and R^{11} is, independently, selected from the group represented by

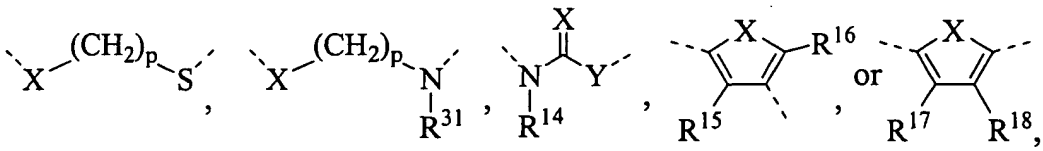


wherein R^{21} is C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkoxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, or C_6-C_{18} aryl, R^{22} is H, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkyloxy, C_1-C_6 alkyloxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, carbo(C_1-C_6 alkyloxy), carbo(C_6-C_{18} aryl C_1-C_6 alkyloxy), carbo(C_6-C_{18} aryloxy), or C_6-C_{18} aryl, and R^{20} is H, OH, or C_1-C_6 alkyloxy, or R^{20} and R^{21} together represent



wherein each of R^{23}, R^{24}, and R^{25} is, independently, H, C_1-C_6 alkyl, halogen, or trifluoromethyl, each of R^{26}, R^{27}, and R^{28} is, independently, H or C_1-C_6 alkyl, and R^{29} is C_1-C_6 alkyl, C_1-C_6 alkyloxy, or trifluoromethyl;

or A is



each of X and Y is, independently, O, NR^{19}, or S,

each of R^{14} and R^{19} is, independently, H or C_1-C_6 alkyl,

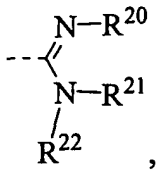
each of R^{15}, R^{16}, R^{17}, and R^{18} is, independently, H, C_1-C_6 alkyl, halogen, C_1-C_6 alkyloxy, C_6-C_{18} aryloxy, or C_6-C_{18} aryl C_1-C_6 alkyloxy,

R^{31} is C_1-C_6 alkyl,

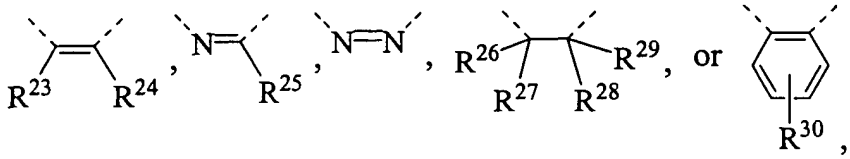
p is an integer between 2 and 6, inclusive,

each of m and n is, independently, an integer between 0 and 2, inclusive,

each of R^{10} and R^{11} is, independently, selected from the group represented by



wherein R^{21} is H, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkoxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, or C_6-C_{18} aryl, R^{22} is H, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_6-C_{18} aryloxy C_1-C_6 alkyl, C_1-C_6 alkyloxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, carbo(C_1-C_6 alkyloxy), carbo(C_6-C_{18} aryl C_1-C_6 alkyloxy), carbo(C_6-C_{18} aryloxy), or C_6-C_{18} aryl, and R^{20} is H, OH, or C_1-C_6 alkyloxy, or R^{20} and R^{21} together represent



wherein each of R^{23}, R^{24}, and R^{25} is, independently, H, C_1-C_6 alkyl, halogen, or trifluoromethyl, each of R^{26}, R^{27}, R^{28}, and R^{29} are, independently, H or C_1-C_6 alkyl, and R^{30} is H, halogen, trifluoromethyl, OCF_3, NO_2, C_1-C_6 alkyl, C_1-C_8 cycloalkyl, C_1-C_6 alkyloxy, C_1-C_6 alkyloxy C_1-C_6 alkyl, hydroxy C_1-C_6 alkyl, C_1-C_6 alkylamino C_1-C_6 alkyl, amino C_1-C_6 alkyl, or C_6-C_{18} aryl, and

each of R^{12} and R^{13} is, independently, H, Cl, Br, OH, OCH_3, OCF_3, NO_2, and NH_2, or R^{12} and R^{13} together form a single bond.

29. The method of claim 27, wherein said composition is administered to said patient by intravenous, intramuscular, inhalation, rectal, or oral administration.

34. A method for treating a patient who has a neoplasm, or inhibiting the development of a neoplasm in a patient, said method comprising administering to said patient:

a) a compound of formula (I); and

b) a PRL phosphatase inhibitor or a PTP1B inhibitor,

wherein said compound of formula (I) and said PRL phosphatase inhibitor or PTP1B inhibitor are administered simultaneously, or within 14 days of each other, in amounts sufficient to inhibit the growth of said neoplasm.

35. The method of claim 34, further comprising administering to said patient one or more Group A antiproliferative agents, wherein said Group A antiproliferative agent, said compound of formula (I), and said PRL phosphatase inhibitor or PTP1B inhibitor are administered simultaneously, or within 14 days of each other, in amounts sufficient to inhibit the growth of said neoplasm.

36. A pharmaceutical pack containing chlorpromazine, or a chlorpromazine analog and pentamidine, or a pentamidine analog.

37. The pharmaceutical pack of claim 36, wherein said chlorpromazine, or chlorpromazine analog and said pentamidine or pentamidine analog are formulated separately and in individual dosage amounts.

38. The pharmaceutical pack of claim 36, wherein said chlorpromazine, or chlorpromazine analog and said pentamidine or pentamidine analog are formulated together and in individual dosage amounts.

39. A composition, wherein chlorpromazine, or a chlorpromazine analog, and pentamidine, or a pentamidine analog, are present in amounts that, when administered together to a patient having a neoplasm, reduce cell proliferation in said neoplasm.

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